# A new species of Astichus Foerster, 1856 from Corsica 

(Hymenoptera, Eulophidae, Euderinae)

By Miktat Doǧanlar

Doǧanlar, M. (1992): A new species of Astichus Foerster, 1856 from Corsica (Hymenoptera, Eulophidae, Euderinae) - Spixiana 15/3: 281-284.

A second species of the subgenus Closteromphale Girault, 1915 (= Linastichus Bouček, 1963) from Europe is described as a new species of Astichus Foerster, 1856, Astichus bachmaieri spec. nov. from Corscia. The specimens were collected by the late F. Bachmaier in 1964 and 1965 from the holes, filled by powderypost of Hypoborus ficus (Col., Scolytidae) into dried trunks of fig trees. The new species is compared with its twin species, Astichus longivittatus Masi, 1925.

Prof. Dr. Miktat Doğanlar, Cumhuriyet Üniversitesi, Tokat Ziraat Fakültesi, Bitki Koruma Bölümü, Tokat, Turkey; c/o Zoologische Staatssammlung, Münchhausenstr. 21, W-8000 München 60, Germany

## Introduction

Bouček (1963) gave a good detailed informations on the history of the genus Astichus Foerster, 1856 discussed the main taxonomical problems, and created a new subgenus, Linastichus Bouček, 1963 for the species A. longivittatus Masi, 1925 from Europe and A. pulchrilineatus Gahan, 1927 from North America. In his study a good diagnostic key for the European species was given. Bouček and Askew (1968) listed five species from the Palearctic, only one of which, A. longivittatus, belong to the subgenus Linastichus. Hedqvist (1969) studied on the North European species and gave a key for 12 species of the subgenus Astichus s. str.

Recently, Bouček (1988) completed a further study on the genus, sinonimized subgenus Linastichus with Closteromphale Girault, 1915 from Australia, and stated as "Closteromphale seems to be a monophyletic cluster and judging from its distribution, with one species from North America, one in Europe and 3 in Australia, it may be of fairly old origin."

In the recent study which was conducted on specimens collected by the late F. Bachmaier in Zoologische Staatssammlung, München, it is found that the specimens which were collected from the holes filled by the powderyposts of Hypoborus ficus (Col., Scolytidae) into dried trunks of fig trees in Corsica, belong to the subgenus Closteromphale as the second species from Europe.

The specimens of the new species are compared with the specimens ( 299 and $6 O^{7} O^{7}$ ) of $A$. longivittatus from Erdoes Collection. Now the specimens were deposited in Zoologische Staatssammlung, München.

# Astichus (Closteromphale) bachmaieri, spec. nov. 

Figs 1-3
Types. Holotype: $\mathcal{Y}$, Cardo, Eselwiese, Bastia, Corsica, (24.VI.1965), 27.VI. 1965 (Leg. Bachmaier), ex. Ficus sp. in Zoologische Staatssammlung, München. - Paratypes: 3 우, $10^{7}$, Cardo R. Sub., Bastia, Corsica (3.VI. 1964), 30.VI. 1964; 1 ㅇ, Corse, Cardo, Bastia, Corsica (3.VI.1964), 24.VI.1964; 7 영, $10^{7}$ (only head), Cardo, Eselwiese, Bastia, Corsica (24.VI.1965), 27.VI. 1965 (all of the types were collected by F. Bachmaier). $3 ¢ \rho$ of paratypes were deposited in the author collection, the others in Zoologische Staatssammlung, München.


Figs 1-3. Astichus bachmaieri spec. nov. 1. $O^{7}$ antenna. 2. $q$ antenna. 3. $q$ forewing.

Diagnosis. Astichus bachmaieri, spec. nov. is very similar to A. longivittatus and A. pulchrilineatus, but the new species differs from the both of them in having female antennae with third and fourth funicular segments yellowish white (in the both species only fourth funicular segment white (Boucek 1963) (Figs 2,4); male with scapus yellowish white, only around the boss in the front of basal half brownish (in longivittatus scapus is almost wholly brown, only basal and apical tips yellowish) (Figs 1,5); forewing with two medially connected brownish bands (in longivittatus forewing with two seperate brownish bands) (Figs 3,6); propodeum with plicae and median carina slightly indicated, and distance between spiracles thrice the length of propodeum medially (in longivittatus plicae and median carina stronger, and almost complete, the distance between spiracles 4 times the median length of propodeum); female gaster 1.12 times as long as thorax (in longivittatus gaster 1.24 times as long as thorax); in female hind margin of the second tergum only slightly incised in middle (in longivittatus it is distinctly incised); the last tergum thrice as broad as long (in longivittatus it is twice as broad as long).

## Description.

Female. Length $0.95-1.40 \mathrm{~mm}$ (Holotype 1.40 mm ). Head and thorax with longitudinal colour stripes, dark violet ones alternating with bright green ones, face and vertex with five green, four violet, pro-and mesonotum, including scapulae, with seven green, six violet, scutellum with three


Figs 4-6. Astichus longivittatus Masi. 4. ㅇ antenna. 5. OT antenna. 6. ㅇ forewing.
green and four violet stripes; propodeum violet; gaster golden violet; scapus yellowish white, with pale brownish ring medially; pedicellus, first two funicular segments and clava black, third and fourth funicular segments yellowish white; legs brownish, excepts are: tibiae with pale ring below their middles, whitish basitarsi, and 2-4. segments of mid and hind tarsi pale brown; wings hyaline, but forewings with two brownish bands, one below basal half of marginal vein, second below apical $1 / 4$ of marginal vein and below stigmal vein, the bands connecting widely in the middle, another small brownish spot below beginning of parastigma; vein brownish, but the parts, connected with the bands, become darker (Fig. 3).

Head and thoracic dorsum minutely, regularly and deeply raised-reticulated; head with clypeal region crescentic; face, sides of frons with minute white hairs; scrobal cavity distinct up to median ocellus, transversely wrinkled; with a transverse grove between scrobe cavity and median ocellus; vertex with 4 rows of white fine hairs; antenna (Fig. 2) located distinctly below level of ventral edge of eyes, scapus almost reaching to ventral edge of median ocellus, its length almost equal to the long diameter of eye, pedicellus twice as long as broad, slightly shorter than first two funicular segments together, first funicular segment slightly transverse, the other ones almost quadrate and slightly longer than the first, clava distinctly broader than funicular segments, slightly longer than three preceding segments together, almost twice as long as broad; eyes minutely haired, almost oval, slightly narrowing backwards.

Pronotum with white hairs on its sides and a row of long yellowish white hairs on hind margin, the length of the hairs almost twice the median length of pronotum.

Mesonotum with 14 rows of white hairs on the both sides of the green stripes, axillae with a row of longer white hairs, scutellum with three pairs of setae in apical half; propodeum finely reticulated, with very fine median carina and plicae, which are sometimes not distinct, when the plicae present the distance between plicae twice length of propodeum medially; distance between spiracles thrice length of propodeum, propodeal callus with 5-6 long setae. Relative measurements: head width 29 ; dorsal length 16 ; height 22 ; frons 16 ; POL 8; OOL 3; eye 13: 13 ; malar space 7 ;
mouth 11 ; scapus 13 ; flagellum plus pedicellus 27 ; thorax $33: 24$; pronotum medially 1.5 , its width 21; mesoscutum 14; scutellum 13:13; forewing breadth 31; gaster 55:28.

Forewing (Fig. 3) with speculum open below, with a broad bare band from stigmal vein to basal vein, only with some minute hairs below tip of parastigma; basal and costal cells with some minute hairs on lower surface; relative measurements of the veins, m; st; pm: 23;5;2.

Hind margin of first gastral tergum distinctly, that of the second tergum slightly incised; last tergum thrice as broad as long.

Male. Length 1.10 mm . Similar to female, excepts as follows: Scapus yellowish white, only basally and a spot in front of basal half pale brown, pedicellus and flagellum almost uniform dark colour, peduncles of last three segments of funicula yellowish white. Antennae (Fig. 1) with scapus having a boss in front of its basal half, pedicellus slightly longer than broad, 1.33 times as long as first funicular segment, the latter without peduncle and slightly transverse, funicular segments 2.-4. almost equal in size, with distinct peduncles, lengths of the peduncles of 2 . and 3. segments as long as nodose part of the segments that bear them, peduncle of 4th segment one-third length of nodose part; clava as long as two preceding segments, including peduncles, together, and 1.6 times as long as broad; 2nd-4th funicular segments with 10 slightly distant long sencillae; petiola short; gaster oval apically, only slightly longer than thorax.

Host. Probably the larvae of Hypoborus ficus in dried trunk of fig tree.
Distribution. Corsica.

## Acknowledgements

The author wishes to thank Dr. F. Bachmaier for collecting those interesting specimens of the new species, Mr. Erich Diller for reviewing the text and his help during my stay in München, Prof. Dr. E. J. Fittkau for giving all facilities in Zoologische Staatssammlung, and the Alexander-von-Humboldt-Stiftung for giving the scholarship.

## References

Bouček, Z. 1963. Studien über europäische Eulophidae, III: Euderinae. - Beit. z. Entom. 13: 272-279
-- 1988. Australasian Chalcidoidea (Hymenoptera). - C-A-B International, Wallingford, Oxon, U. K.: 663-664
-- \& R. R. Askew 1968. Palearctic Eulophidae (exl. Tetrastichinae) (Hym., Chalcidoidea). - Index of Entomophagous Insects, Paris: 75-76
Hedqvist, K. J. 1969. Notes on the genus Astichus Först. and descriptions of new species (Hym., Chalcidoidea, Eulophidae, Euderinae). - Entomol. Ts. Arg. 90: 166-173

